

Whilst history may not be kind to Gaumer because of the apparent lack of detail and precision on some of his labels (Parkes 1970), I believe that this record should stand as credible evidence of the Giant Kingbird's once-wider range, to include the North American continent, even if the precise location where this particular specimen was taken is considered somewhat uncertain. Given the species' modern rarity (Collar *et al.* 1994), it is unlikely to be known whether the Giant Kingbird formerly had a wider breeding range, or merely wandered beyond Cuba during the non-breeding season.

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References:

- AOU. 1983. *Check-list of North American birds*, 6th ed. American Ornithologists' Union, Washington, D.C.
- AOU. 1998. *Check-list of North American birds*, 7th ed. American Ornithologists' Union, Washington, D.C.
- Buden, D.W. 1987. *The birds of the southern Bahamas*. BOU Check-list No. 8, Tring.
- Collar, N.J., Crosby, M.J. & Stattersfield, A.J. 1994. *Birds to watch 2: the world list of threatened birds*. BirdLife Conservation Series No. 4, Cambridge, UK.
- Howell, S.N.G. & Webb, S. 1995. *A guide to the birds of Mexico and northern Central America*. Oxford Univ. Press, Oxford.
- Parkes, K.C. 1970. On the validity of some supposed "first state records" from Yucatán. *Wilson Bull.* 82: 92-95.
- Paynter, R.A., Jr. 1955. The ornithogeography of the Yucatán Peninsula. *Bull. Peabody Mus. Nat. Hist.* No. 9.
- Salvin, O. 1889. A list of the birds of the islands of the coast of Yucatán and the Bay of Honduras [based on a collection by George F. Gaumer]. Part 2. *Ibis* 31: 359-379.

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The Fawn-breasted Brilliant *Heliodoxa rubinoides*, a hummingbird species new to Bolivia

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The Fawn-breasted Brilliant *Heliodoxa rubinoides* is a polytypic medium-sized hummingbird (length 11-13 cm, body mass *c.* 7-10 g) without marked sexual dimorphism. It is widespread from the Andes of Colombia to Ecuador and Peru (Fig. 1).

Here we report its first occurrence from Bolivia at Cocapata, c. 1,000 km south of its presently known range.

Material and methods

We studied 80% of the available scientific material, i.e., 125 *H. rubinoides* specimens from Colombia, Ecuador, Peru, and one recently discovered specimen from Bolivia. Morphometric measurements, e.g., bill length, wing length and fork of tail (difference between inner and outermost rectrix), taken with a digital caliper, were compared statistically (Man-Whitney U-test, $p < 0.05$). We analyzed plumage patterns by means of an illuminating magnifying glass ($\times 10$) under constant artificial light conditions. Descriptions of colours (capitalized, numbers in brackets) refer to Smithe (1975).

Description and distribution of *Heliodoxa rubinoides* subspecies

Three subspecies of *Heliodoxa rubinoides* are presently recognized, showing the following differences:

H. r. rubinoides: Bill of males and females black, thick, almost straight. Males dorsally Parrot Green [160], rectrices and upper tail coverts Olive Green [48] with Cinnamon [39] rachis. Wings Sepia Brown [119] with Cinnamon secondaries and Parrot

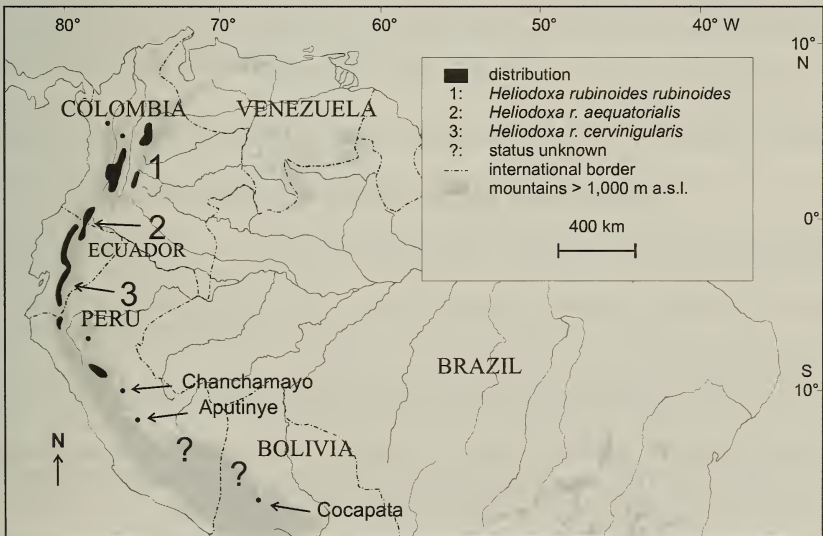


Figure 1. Distribution of *Heliodoxa rubinoides*. The new location in Bolivia (Cocapata) and the formerly southernmost localities (Chanchamayo, Aputinye) in Peru are indicated by arrows.

TABLE 1

Morphometric characters of the three subspecies of *Heliodoxa rubinoides*, showing mean \pm SD and sample size (in brackets). p: significance levels of the mensural characters between subspecies, ns: not significant, (a): *aequatorialis*, (r): *rubinoides*, (c): *cervinigularis*. All measurements in mm, body mass in g.

Taxon	Sex	Bill length	p	Tail furcation	p	Wing	p	Body mass
<i>aequatorialis</i>	♂	27.3 \pm 1.3 (43)	0.01 (r)	10.5 \pm 2.6 (38)	0.02 (r)	71.2 \pm 2.1 (43)	0.01 (r)	8.4 – 9.2 (5)
	♀	29.1 \pm 2.8 (23)	0.01 (r)	5.4 \pm 1.6 (25)	ns (r)	66.2 \pm 2.1 (24)	ns (r)	7.7 (1)
<i>rubinoides</i>	♂	28.0 \pm 1.4 (15)	ns (c)	9.2 \pm 4.2 (13)	0.01 (c)	68.2 \pm 5.2 (15)	ns (c)	7.4 (1)
	♀	31.8 \pm 1.0 (4)	0.01 (c)	7.5 \pm 0.5 (3)	0.03 (c)	66.5 \pm 2.5 (4)	ns (r)	-
<i>cervinigularis</i>	♂	29.4 \pm 1.6 (12)	0.01 (a)	12.0 \pm 2.6 (10)	0.01 (a)	70.8 \pm 3.7 (12)	0.01 (a)	7.2, 8.0 (2)
	♀	30.7 \pm 0.9 (13)	0.01 (a)	6.3 \pm 1.6 (8)	ns (a)	64.4 \pm 2.4 (12)	ns (a)	7.2 – 10.2 (9)
Specimen from								
Bolivia	♂	27.8		11.7		72.5		-

Green wing coverts. Chin Parrot Green, throat centre with a small circular iridescent Vinaceous [3] patch. Ventral side Cinnamon, Parrot Green glittering discs on flank and chin. Immature females lack metallic throat patch, appearing with increasing age and always smaller than that of males. Chin and belly Cinnamon mostly without green discs. Immatures of both sexes similar to adult female but completely lack iridescent throat patch.

H. r. aequatorialis: Similar to nominate race except wing coverts are Cinnamon.

H. r. cervinigularis: Similar to nominate race, except for larger size and homogeneously Parrot Green flanks.

Mensural characteristics and body masses of these subspecies are given in Table 1.

Habitat and geographical distribution

Heliodoxa rubinoides is found at Andean elevations between 1,500 and 2,700 m in Colombia, Ecuador, and Peru. Records from the southwestern Cordillera in Colombia suggest vertical movements to altitudes below 1,000 m (Hilty & Brown 1986). *H. rubinoides* is uncommon and mostly local throughout its distributional range (Chapman 1917).

The nominate race inhabits humid mountain ranges and páramos of Huila, Cauca, Santander, and forest fragments in Antioquia, Colombia. *H. r. aequatorialis* occurs in cloud forests of the eastern Cordillera of Nariño, Colombia, and Sucumbíos, Ecuador. *H. r. cervinigularis* is found in similar habitats throughout the western Cordillera of Ecuador and in parts of Pasco, Huánuco, Junin, and Cuzco, Peru.

The two southernmost distribution records of *H. r. cervinigularis* are from Chanchamayo, depto. Junin (11°03'S, 75°19'W) (Hilty & Brown 1986, Fjeldså & Krabbe 1990, Schuchmann 1999) and from Aputinye, depto. Cuzco (13°00'S, 72°32'W), both

in Peru (one specimen, Senckenberg Museum Frankfurt, # 915, leg. J. Kalinowski, July 1890; sight records, Parker & O'Neill 1980).

From Charles Cordier, Bolivia, our institute in Bonn obtained in 1982 a specimen of *H. rubinoides* from Cocapata (16°57'S, 66°43'W), north of Cochabamba (adult male, ZFMK # 84.113), Bolivia. The specimen is attributable to the subspecies *cervinigularis* since all morphological and mensural characters lie within the range of this taxon (Table 1). Charles Cordier collected this specimen at an elevation of c. 3,000 m in *Polylepis* forest. The Bolivian record signifies a considerable range extension (1,000 km south of Aputinye, Cuzco, Peru), and according to Remsen & Traylor (1989) and Remsen (pers. comm.) is the first for Bolivia (see Fig. 1). The apparent geographical discontinuity between the Peruvian and the Bolivian distribution is most likely due to low collecting activities along the western Andean ranges of these countries (Stephens & Traylor 1983, Paynter 1992).

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References:

- Chapman, F. M. 1917. *Distribution of bird-life in Colombia*. American Museum of Natural History, New York.
- Fjeldså, J., & Krabbe, N. 1990. *Birds of the high Andes*. Zoological Museum, University of Copenhagen.
- Hilty, S. L., & Brown, W. L. 1986. *A guide to the birds of Colombia*. Princeton University Press.
- Parker, T. A., & O'Neill, J. P. 1980. Notes on little known birds of the upper Urubamba Valley, southern Peru. *Auk* 97: 167-176.
- Remsen, J. V., & Traylor, M. A. 1989. *An annotated list of the birds of Bolivia*. Buteo Books, Vermillion, South Dakota.
- Schuchmann, K.-L. 1999. Family Trochilidae (Hummingbirds). Pp. 468-680 in: del Hoyo, J., Elliot, A., & J. Sargatal (eds.): *Handbook of the birds of the world*, Vol. V, Lynx, Barcelona.
- Smithe, F. B. 1975. *Naturalist's color guide*. American Museum of Natural History, New York.

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